

IN THE CLAIMS

Claim 1 (Currently Amended): A mounting hat for a brake rotor comprising:
a lower section coupled to an upper section,
a plurality of aerodynamically shaped standoff vanes each having a leading edge, a trailing edge, a top, and a bottom coupled to the upper section, the aerodynamically shaped standoff vanes space apart the upper section from a brake rotor, wherein the leading edge and the trailing edge are curved and have different shapes; and

a plurality of vents formed between adjacent aerodynamically shaped standoff vanes, wherein the vents are circumferentially distributed on the upper section, and air located within said mounting hat and air deflected from said brake rotor are induced to substantially flow through the plurality of vents in a direction outward from a radial interior of said mounting hat to a radial exterior of said mounting hat.

Claim 2 (Canceled)

Claim 3 (Original): The mounting hat of claim 1, wherein the leading edge and the trailing edge of the plurality of aerodynamically shaped standoff vanes are one of stepped up and ramped up from the upper section towards the top of the plurality of aerodynamically shaped standoff vanes.

Claim 4 (Withdrawn): The mounting hat of claim 1, wherein the leading edge and the trailing edge of the plurality of aerodynamically shaped standoff vanes are symmetrical.

Claim 5 (Previously Presented): The mounting hat of claim 1, wherein the leading edge and the trailing edge of the plurality of aerodynamically shaped standoff vanes are asymmetrical from a center point along each of the leading edge and the trailing edge.

Claim 6 (Original): The mounting hat of claim 1, wherein the top of the plurality of aerodynamically shaped standoff vanes is bored to accept one of a drive pin, a bolt, and a lug.

Claim 7 (Withdrawn): The mounting hat of claim 1, wherein the upper section includes distributed openings.

Claim 8 (Withdrawn): The mounting hat of claim 7, wherein the plurality of aerodynamically shaped standoff vanes include an extension for coupling to the distributed openings.

Claim 9 (Withdrawn): A mounting hat for a brake rotor comprising:
a lower section coupled to an upper section,
a plurality of first aerodynamically shaped standoff vanes each having a leading edge, a trailing edge, a top and a bottom coupled to the upper section;
a plurality of second aerodynamically shaped standoff vanes each having a leading edge, a trailing edge and a top coupled to the upper section; and
a plurality of vents formed between adjacent first aerodynamically shaped standoff vanes and second aerodynamically shaped standoff vanes,
wherein the vents are circumferentially distributed on the upper section, and air flow is induced to flow through the plurality of vents.

Claim 10 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff vanes are curved.

Claim 11 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are curved.

Claim 12 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff

vanes are one of stepped up and ramped up from the upper section towards the top of the plurality of first aerodynamically shaped standoff vanes.

Claim 13 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are one of stepped up and ramped up from the upper section towards the top of the plurality of second aerodynamically shaped standoff vanes.

Claim 14 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff vanes are symmetrical.

Claim 15 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are symmetrical.

Claim 16 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff vanes are asymmetrical

Claim 17 (Withdrawn): The mounting hat of claim 9, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are asymmetrical.

Claim 18 (Withdrawn): The mounting hat of claim 9, wherein the top of the plurality of first aerodynamically shaped standoff vanes is bored to accept one of a drive pin, a bolt, and a lug.

Claim 19 (Withdrawn): The mounting hat of claim 9, wherein the upper section includes distributed openings.

Claim 20 (Withdrawn): The mounting hat of claim 19, wherein the plurality of aerodynamically shaped standoff vanes include an extension for coupling to the distributed openings.

Claim 21 (Previously Presented) A brake rotor comprising:

a rotor,

a hub having a plurality of aerodynamically shaped standoff vanes each having a leading edge, a trailing edge, a top, a bottom and a plurality of vents formed between adjacent aerodynamically shaped standoff vanes coupled to the rotor, the leading edge and the trailing edge each having different shapes, wherein the vents are circumferentially distributed between the hub and the rotor, air flow is induced to flow through the plurality of vents, and the aerodynamically shaped standoff vanes space apart the hub from the rotor.

Claim 22 (Canceled)

Claim 23 (Original): The brake rotor of claim 21, wherein the leading edge and the trailing edge of the plurality of aerodynamically shaped standoff vanes are one of stepped up and ramped up towards the top of the plurality of aerodynamically shaped standoff vanes.

Claim 24 (Withdrawn): The brake rotor of claim 21, wherein the leading edge and the trailing edge of the plurality of aerodynamically shaped standoff vanes are symmetrical.

Claim 25 (Previously Presented): The brake rotor of claim 21, wherein the leading edge and the trailing edge of the plurality of aerodynamically shaped standoff vanes are asymmetrical.

Claim 26 (Original): The brake rotor of claim 21, wherein the top of the plurality of aerodynamically shaped standoff vanes is bored to accept one of a drive pin, a bolt, and a lug.

Claim 27 (Withdrawn): The mounting hat of claim 21, wherein the upper section includes distributed openings.

Claim 28 (Withdrawn): The mounting hat of claim 27, wherein the plurality of aerodynamically shaped standoff vanes include an extension for coupling to the distributed openings.

Claim 29 (Withdrawn): A brake rotor comprising:
a rotor;
a hub having a plurality of first aerodynamically shaped standoff vanes each having a leading edge, a trailing edge, a top and a bottom coupled to the hub;
a plurality of second aerodynamically shaped standoff vanes each having a leading edge, a trailing edge and a top coupled to the hub; and
a plurality of vents formed between adjacent first aerodynamically shaped standoff vanes and second aerodynamically shaped standoff vanes,
wherein the vents are circumferentially distributed between the hub and the rotor, and air flow is induced to flow through the plurality of vents.

Claim 30 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff vanes are curved.

Claim 31 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are curved.

Claim 32 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff vanes are one of stepped up and ramped up towards the top of the plurality of first aerodynamically shaped standoff vanes.

Claim 33 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are one of stepped up and ramped up towards the top of the plurality of second aerodynamically shaped standoff vanes.

Claim 34 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff vanes are symmetrical.

Claim 35 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are symmetrical.

Claim 36 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of first aerodynamically shaped standoff vanes are asymmetrical.

Claim 37 (Withdrawn): The brake rotor of claim 29, wherein the leading edge and the trailing edge of the plurality of second aerodynamically shaped standoff vanes are asymmetrical.

Claim 38 (Withdrawn): The brake rotor of claim 29, wherein the top of the plurality of first aerodynamically shaped standoff vanes is bored to accept one of a drive pin, a bolt, and a lug.

Claim 39 (Withdrawn): The mounting hat of claim 29, wherein the upper section includes distributed openings.

Claim 40 (Withdrawn): The mounting hat of claim 39, wherein the plurality of aerodynamically shaped standoff vanes include an extension for coupling to the distributed openings.